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(54) **METHODS OF IMPLANTING A PROSTHESIS**

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See application file for complete search history.

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This patent is subject to a terminal disclaimer.

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(57)

ABSTRACT

A method of implanting a prosthesis in a patient at a treatment site within a blood vessel includes advancing an outer catheter of a prosthesis delivery system in the patient distal to the treatment site, the outer catheter defining an inside diameter and advancing an inner sheath, having greater flexibility than the outer catheter and an outside diameter that is greater than the inside diameter of the outer catheter, and a guidewire lumen of the delivery system from the outer catheter to the treatment site along a guidewire while the outer catheter remains stationary relative to the patient, whereby advancing the inner sheath delivers the prosthesis to the treatment site. The inner sheath is retracted to deploy the prosthesis from within the inner sheath and at the treatment site after which the delivery system from the patient.

4 Claims, 24 Drawing Sheets

